

REMARKS

I. Preliminary Remarks

There are no amendments with this response.

II. Patentability Arguments

A. The Rejections of Claims 26, 41-46 and 54 Under 35 U.S.C. §103(a) Should be Withdrawn

The pending claims stand rejected under 35 U.S.C. §103(a) allegedly for being obvious over the combination of US Patent Application 2002/0085997 to Schmidt et al. ("Schmidt") in view of Sun et al. in Cancer Gene Ther. 2(3): 183-190, 1995 ("Sun") and U.S. patent 6,277,368 to Hiserodt et al., filed on October 29, 1996 and issued on August 21, 2001 ("Hiserodt").

On May 3, 2007, the United States Patent and Trademark Office issued a memorandum (enclosed as Exhibit A) providing guidance to an Examiner with respect to the analysis supporting a rejection under 35 U.S.C. §103(a) in light of the Supreme Court decision on *KSR Int'l. Co., v. Teleflex, Inc.* Specifically, at page 2, the memorandum states "The [*KSR*] court noted that the analysis supporting a rejection under 35 U.S.C. §103(a) should be made explicit, and that it was important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements in the manner claimed." For the following reasons we believe that a person of ordinary skill in the art would not have been prompted to combine the cited references because *inter alia* one of the references teaches away from the present invention and even if they were combined, they would not give rise to the present invention.

Instant claim 26 recites "a method of treating a tumor in an animal which comprises administering to said animal a tumor inhibiting effective amount of an antigen-presenting cell, wherein said antigen-presenting cell expresses at least one class I MHC or class II MHC determinant

that is syngeneic to said animal and at least one class I or II MHC determinant that is allogeneic to said animal, wherein said antigen-presenting cell is selected from the group consisting of professional antigen-presenting cells and facultative antigen-presenting cells, and wherein said antigen-presenting cell is transfected with total genomic DNA isolated from the tumor cells of said animal.”

Schmidt et al. disclose methods in which a cancer vaccine is made by charging certain cells with a peptide derived from tumor antigens. According to Schmidt et al., any of the following cells can be used in its methods: 1) patient’s tumor cells, 2) patient’s autologous fibroblasts or 3) cells from fibroblast cell lines which are either matched to the HLA-subtype of the patient or have been transfected with corresponding MHC-I gene ([0085] at page 7 of Schmidt).

In an explicit teaching away from the present invention, paragraph [0021] of Schmidt states that “**In contrast to approaches** in which . . . the antigen is presented via transfection with a DNA coding for the protein, *the invention* is to provide a vaccine which triggers an efficient immune response whilst being simpler to manufacture.” Thus, Schmidt teaches away from using DNA transfection all together and instead teaches charging the cells with peptides derived from tumor cells.

Because as a matter of law, if a first reference “teaches away from a second reference, then that finding alone can defeat [an] obviousness claim” based on a combination of the two references (see, e.g., *Winner International Royalty Corp. v. Wong*, 202 F.3d 1340, 53 USPQ2d 1580 (Fed. Cir. 2000)), the Applicants submit that the rejection under 35 U.S.C. § 103 should, as a matter of law, be withdrawn.

In the second paragraph at page 8 of the office action, the Examiner states that Schmidt et al. do not teach transfecting antigen-presenting cells with genomic DNA or sheared genomic DNA from a neoplasm such that some gene products represent tumor-associated T-cell epitopes and “that this deficiency is made up for in the teachings of Sun et al. which discloses cytokine-secreting fibroblasts transfected with sheared, unfractionated DNA from different mouse neoplasms.” However, given that Schmidt teaches away from using transfection, the Applicant respectfully submits that a person of ordinary skill in the art would not be prompted to combine the references and, therefore that the rejection under 35 U.S.C. § 103 may be withdrawn.

At page 7 of the office action, the Examiner characterizes Hiserodt as teaching development of a cellular composition and method for using it in cancer immunotherapy, particularly in human patients. Hiserodt does not disclose or suggest a vaccine which comprises an antigen-presenting cell expressing at least one class I MHC or class II MHC determinant that is syngeneic and at least one class I MHC or class II MHC determinant that is allogeneic to a vaccine recipient and that transfected with tumor genomic DNA derived from a tumor in an animal to be treated with the vaccine. Thus, Hiserodt does not remedy deficiencies of Schmidt and Sun.

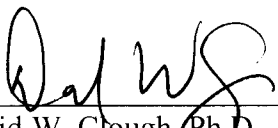
Further, the Schmidt/Sun/Hiserodt combination of references does not teach or suggest the subject matter of the present claims as discussed in detail above nor would a person of ordinary skill be prompted to combine the references. Because of these failures, the cited combination of references cannot render the claims obvious as a matter of law and therefore the rejection under 25 U.S.C. 103(a) can be properly withdrawn and the withdrawal is respectfully requested.

Conclusion

Applicant respectfully submits that pending claims are in condition for allowance and early notification thereof is requested. If in the interest of expediting prosecution, the Examiner has questions or comments he is invited to telephone the undersigned at the indicated telephone number.

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